

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF THE CLAIMS:

1-14. (Canceled).

15. (Currently Amended) A press-fit diode, comprising:

 a head wire;
 a base;
 a chip connected via solder layers to the head wire and to the base;
 at least a first bevel located at a top of a housing and a second bevel located at a bottom of the housing, wherein the first and second bevels enable press-fitting of the diode;
and

 a plastic sheathing which includes a sleeve and is situated at least in an area around the chip and forms a mechanical connection between the base and the head wire, wherein the base at least partially encloses the plastic sheathing and forms the housing with the plastic sheathing, and wherein the base includes at least one undercut which extends into the plastic sheathing, and wherein a trench clearance is provided between the sleeve of the plastic sheathing and an upper area of the base, the clearance preventing contact between the sleeve and an outer edge of the upper area of the base.

16. (Previously Presented) The press-fit diode as recited in claim 15, wherein the base is made of at least one of an electrically conductive material and thermally conductive material.

17. (Previously Presented) The press-fit diode as recited in claim 16, wherein a height of the base is selected to be between 0.5 mm to 0.8 mm to achieve an adequate clamping of the base and the head wire.

18. (Currently Amended) The press-fit diode as recited in claim 17, wherein the bevels first and second bevels enable the diode to be pressed into a rectifier.

19. (Previously Presented) The press-fit diode as recited in claim 17, wherein the plastic sheathing in the area around the chip is made up of an area filled with a casting compound.
20. (Currently Amended) The press-fit diode as recited in claim 17, wherein the trench clearance has a predetermined depth and is provided between the sleeve and an outer area of the base.
21. (Current Amended) The press-fit diode as recited in claim 20, wherein the trench clearance has a width which is approximately 0.1 mm in at least one area of the trench clearance.
22. (Currently Amended) The press-fit diode as recited in claim 21, wherein the width of the trench clearance is essentially uniform over the entire depth of the trench clearance.
23. (Currently Amended) The press-fit diode as recited in claim 21, wherein the width of the trench clearance is variable over the depth of the trench clearance.
24. (Previously Presented) The press-fit diode as recited in claim 17, wherein the base includes an outer region having a first area with a first inner diameter and a second area with a second inner diameter smaller than the first inner diameter.
25. (Canceled).
26. (Previously Presented) The press-fit diode as recited in claim 15, wherein the housing is made of at least one of an electrically conductive material and thermally conductive material.